

What is claimed is:

1. A method comprising:

supplying successive sections of an input line of a digital image to different imaging beams along a fast scanning direction defined by a vertical resolution,

supplying each of a plurality of imaging beams with a respective data sequence comprising sections of successive input lines of a digital image, said successive input lines being exposed along a slow scanning direction defined by a horizontal resolution, and

imaging at least one exposure line with a variable resolution along said fast scanning direction,

wherein the size of said sections is determined by said variable resolution.

2. The method of claim 1, further comprising altering the data sequence of at least one active imaging beam when the number of active imaging beams is varied.

3. The method of claim 1, further comprising seamlessly attaching the tail of a section of an input line with the head of the next section of said input line.

4. The method of claim 1, further comprising seamlessly attaching the tail of a section of an input line with the head of a section of the following input line.

5. A method comprising:

supplying each of a plurality of imaging beams with a respective data sequence comprising sections of successive input lines of a digital image so that the image generated by said plurality of imaging beams has desired geometrical properties, wherein said desired geometrical properties include having image edges parallel to a given line orientation, and

imaging successive lines of at least one exposure along a first scanning direction, each line of said exposure having a variable resolution along a second scanning direction that differs from said first scanning direction,

wherein the size of said sections is determined by said variable resolution.

6. The method of claim 5, wherein said desired geometrical properties include having image edges parallel to a gripper line of a plate holding system.

7. The method of claim 5, wherein said desired geometrical properties include having image edges parallel to a gripper line of a paper holding system.

8. A method comprising:

supplying each of a plurality of marking elements with a respective data sequence comprising sections of successive input lines of a digital image along a first scanning direction, and

recording at least one exposure with a variable resolution along a second scanning direction, said second scanning direction being different than said first scanning direction,

wherein the size of said sections is determined by said variable resolution.

9. The method of claim 8, further comprising altering the data sequence of at least one active marking element when the number of active marking elements is varied.

10. The method of claim 8, further comprising seamlessly attaching the tail of a section of an input line with the head of the next section of said input line

11. The method of claim 8, further comprising seamlessly attaching the tail of a section of a particular input line with the head of another section of the following input line.

12. A method comprising

supplying each of a plurality of marking elements with a respective data sequence comprising sections of successive input lines of a digital image so that the image generated by said plurality of marking elements has desired geometrical properties, said successive input lines being arranged along a first scanning direction, and

marking with a variable resolution along a second scanning direction, which determines the size of each of said sections,

said second scanning direction being different than said first scanning direction.

13. The method of claim 12, wherein said desired geometrical properties include having image edges parallel to a gripper line of a printing system.

14. The method of claim 12, wherein said desired geometrical properties include having image edges parallel to a given line orientation.

15. The method of claim 12 further comprises printing in a duplex mode.

16. The method of claim 15, wherein images printed on both sides of a sheet in said duplex mode are imaged at different resolutions.

17. The method of claim 15, wherein said printing uses a different number of active marking elements for each side of a sheet.

18. An imaging system comprising:

a plurality of imaging beams; and

means for supplying each of said imaging beams with a respective data sequence comprising sections of successive input lines of a digital image along a first scanning direction;

wherein the size of said sections is determined by a variable resolution along a second scanning direction;

said second scanning direction being different than said first scanning direction.

19. The system according to claim 18, further comprising means for altering the data sequence of at least one active imaging beam when the number of active imaging beams is varied.

20. A method of exposing an image comprising:

scanning successive exposure lines of said image along a first scanning direction; and

varying a resolution of each exposure line along a second scanning direction;

said first scanning direction differing from said second scanning direction.

21. A method according to claim 20, wherein said first scanning direction defines a horizontal exposure of said image and said second scanning direction defines a vertical exposure of said image.